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APPLICATION NO.	FILING DATE	FIRST NAMED INVENTOR	ATTORNEY DOCKET NO.	CONFIRMATION NO.
09/691,006	10/18/2000	James R. Leger	110.01420101	4510

26813 7590 07/07/2003

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EXAMINER

PHAM, HOA Q

ART UNIT	PAPER NUMBER
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2877

DATE MAILED: 07/07/2003

Please find below and/or attached an Office communication concerning this application or proceeding.

Office Action Summary

Application No.

09/691,006

Applicant(s)

LEGER ET AL.

Examiner

Hoa Q. Pham

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --

Period for Reply

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133).
- Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

Status

- 1) ☒ Responsive to communication(s) filed on 17 June 2003.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

Disposition of Claims

- 4) ☒ Claim(s) 1-44 is/are pending in the application.
- 4a) Of the above claim(s) _____ is/are withdrawn from consideration.
- 5) ☐ Claim(s) _____ is/are allowed.
- 6) ☒ Claim(s) 1-44 is/are rejected.
- 7) ☐ Claim(s) _____ is/are objected to.
- 8) ☐ Claim(s) _____ are subject to restriction and/or election requirement.

Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on _____ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.
- Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).
- 11) ☐ The proposed drawing correction filed on _____ is: a) ☐ approved b) ☐ disapproved by the Examiner.
- If approved, corrected drawings are required in reply to this Office action.
- 12) ☐ The oath or declaration is objected to by the Examiner.

Priority under 35 U.S.C. §§ 119 and 120

- 13) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some * c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. _____.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- * See the attached detailed Office action for a list of the certified copies not received.
- 14) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. § 119(e) (to a provisional application).
- a) ☐ The translation of the foreign language provisional application has been received.
- 15) ☐ Acknowledgment is made of a claim for domestic priority under 35 U.S.C. §§ 120 and/or 121.

Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☒ Information Disclosure Statement(s) (PTO-1449) Paper No(s) 15.
- 4) ☐ Interview Summary (PTO-413) Paper No(s). _____
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other:

DETAILED ACTION

Continued Examination Under 37 CFR 1.114

1. A request for continued examination under 37 CFR 1.114, including the fee set forth in 37 CFR 1.17(e), was filed in this application after final rejection. Since this application is eligible for continued examination under 37 CFR 1.114, and the fee set forth in 37 CFR 1.17(e) has been timely paid, the finality of the previous Office action has been withdrawn pursuant to 37 CFR 1.114. Applicant's submission filed on 6/17/03 has been entered.

2. The "Petition Under C.F.R 1.182" for changing the order of the inventors has been received and will forward to the "Petition Office" for approval.

Claim Rejections - 35 USC § 102

1. The following is a quotation of the appropriate paragraphs of 35 U.S.C. 102 that form the basis for the rejections under this section made in this Office action:

A person shall be entitled to a patent unless –

(e) the invention was described in (1) an application for patent, published under section 122(b), by another filed in the United States before the invention by the applicant for patent or (2) a patent granted on an application for patent by another filed in the United States before the invention by the applicant for patent, except that an international application filed under the treaty defined in section 351(a) shall have the effects for purposes of this subsection of an application filed in the United States only if the international application designated the United States and was published under Article 21(2) of such treaty in the English language.

2. Claims 1, 4, 9-11, 13, 16, 21-22, 24-25, 27, 29, 33-35, 37, and 42-43 are rejected under 35 U.S.C. 102(e) as being anticipated by Kuhn (6,404,544).

Regarding claims 1, 13, 25, 27, and 35, Kuhn discloses a microscope system comprises an objective lens (22), an illumination source (38) provides incident light normal to the sample plane, the incident light comprises linearly polarized light incident on the objective lens wherein the linearly polarized light comprises p and s wave components, a spatial filter (124) is positioned at a plane of an exit pupil of the objective lens, and an analyzer portion (48) operable to generate polarization information base on the reflected light , wherein the polarization information is a function of the p and s wave components of the incident light having different reflectivities from the sample (see figure 4, column 6, lines 12-32, line 60 through column 7 line 12).

Regarding claims 4, 16, 29 and 37, figure 4 shows that the spatial filter (124) is located at pupil plane.

Regarding claim 9, see beam splitter (114) in figure 4.

Regarding claims 10-11, 21-22, 33-34, and 42-43; see column 6, lines 25-26 for 45 degrees with respect to the incident plane of the linearly polarized light.

Regarding claim 24, see column 6, line 2 for linear-polarizer 42.

Claim Rejections - 35 USC § 103

3. The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

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4. Claims 2-3, 5-8, 12, 14-15, 17-20, 23, 26, 28, 30-32, 36, 38-41 and 44 are rejected under 35 U.S.C. 103(a) as being unpatentable over Kuhn in view of Ghislain et al (5,939,709).

Regarding claims 2, 8, 14, 26, 28, and 36, Kuhn does not explicitly teach the use of optical fiber and a collimator; however, such the features are known in the art as taught by Ghislain et al. Ghislain et al (of record) teaches the use of optical fiber for transmitting and receiving light and a collimator (36b) (see column 12 lines 44-45 and figure 3A). Those of ordinary skill in the art at the time the invention was made to include in Kuhn an optical fiber for transmitting light from the light source and a collimator for collimating light. The rationale for this modification would have arisen from the fact that using such optical fibers would prevent loss light within the measuring device.

Regarding claims 3 and 15, it would have been obvious to use an objective lens of Kuhn having the NA in the range of 0.5 to 1 so that the small objects could be observed.

Regarding claims 5-6, 17, 30-31, and 38, Kuhn teaches that the spatial filter (124) can be located next to the objective lens (22) (see figure 4) and does not teaches that it could be located in a conjugate plane of an exit pupil of the objective lens. However, it would have been to one having ordinary skill in the art at the time the invention was made to position the spatial filter in a conjugate plane of an exit pupil of the objective lens because no matter where it is located it still function in the same manner.

Regarding claims 7, 18-19, 20, 23, 32, 39-41, and 44, Kuhn teaches that the polarizer 42 could be rotated and analyzer 48 is fixed; however, it would have been obvious to one having ordinary skill in the art at the time the invention was made to rotate the analyzer and keep the polarizer fixed, because they would function in the same manner.

Regarding claim 12, it would have been obvious to one having ordinary skill in the art at the time the invention was made to replace the light source (38) of Kuhn by a thin filament bulb because it does not matter what types of the light source, the device would function in the same manner. A substitution one for another is generally recognized as being within the level of ordinary skill in the art.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Hoa Q. Pham whose telephone number is (703) 308-4808. The examiner can normally be reached on 6:30 AM to 5 PM, Monday through Thursday.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Frank G. Font can be reached on (703) 308-4881. The fax phone numbers for the organization where this application or proceeding is assigned are (703) 308-7722 for regular communications and (703) 308-7722 for After Final communications.

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Any inquiry of a general nature or relating to the status of this application or proceeding should be directed to the receptionist whose telephone number is (703) 308-0956.

A handwritten signature in black ink, appearing to read 'Hoa Q. Pham', with a long horizontal line extending to the right.

Hoa Q. Pham
Primary Examiner
Art Unit 2877

HP
June 26, 2003